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(71) Applicant (for all designated States except US): ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY [US/US]; 1300 Morris Park Avenue, Bronx, NY 10461 (US).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): MARTIN, Alberto [CA/US]; 1579 Rhineland Avenue, Apt. 2J, Bronx, NY 10461 (US). SCHARFF, Matthew, D. [US/US]; 25 Pryer Manor Road, Larchmont, NY 10538 (US).

(74) Agents: ARNOLD, Craig, J. et al.; Amster, Rothstein & Ebenstein, 90 Park Avenue, New York, NY 10016 (US).

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(54) Title: MUTATIONS CAUSED BY ACTIVATION-INDUCED CYTIDINE DEAMINASE

(57) Abstract: Methods for causing mutations in genes expressed in eukaryotic cells are provided. The methods involve expressing an activation-induced cytidine deaminase (AID) in the cells. The mutated genes can be any gene that is operably linked to a promoter, where the gene is within about 2 kilobases of the promoter. Examples include antibody genes. Also provided are cells expressing AID. The cells can be from any eukaryote, and include hybridoma cells and myeloma fusion partners.